501.36931CX1

13/03

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

IWASAKI, et al

Serial No.:

09/985.904

Filed:

November 6, 2001

For:

SEMICONDUCTOR DEVICE HAVING LAYERED

INTERCONNECT STRUCTURE WITH A COPPER OR PEATINUM CONDUCTING FILM AND A NEIGHBORING FILM (As Areended)

**Group Art Unit:** 

2813

Examiner:

Stephen W. Smoot

## **AMENDMENT**

Assistant Commissioner for Patents Washington, D.C. 20231

January 17, 2003

Sir:

In response to the Office Action mailed October 21, 2002, please amend the above-identified application as follows:

## IN THE CLAIMS:

Please amend the claims presently in the application as follows:

1. (Amended) A semiconductor device having a layered interconnection structure including a copper film overlying a surface of a semiconductor substrate, wherein the layered interconnection structure includes the copper film and a wherein the layered interconnection structure includes the copper film and a wherein the layered interconnection structure includes the copper film and a wherein the copper film and the semiconductor of (a) adjacent the copper film and (b) between the copper film and the semiconductor substrate, the neighboring film having, as a primary constituent element thereof, an element selected from a group consisting of rhodium, ruthenium, iridium, osmium and platinum, wherein the neighboring film

substantially prevents voids due to electromigration of copper.

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